REMARKS

Applicant respectfully requests reconsideration. Claims 3-15, 55-59, and 69-75 are currently pending in this application with claims 3, 55, and 69 being independent. No amendments have been made to the claims.

Rejection of claims 3-15, 55-59, and 69 under 35 U.S.C. §102(b)

Claims 3-15, 55-59, and 69 was rejected under 35 U.S.C. §102(b) as being anticipated by Schnur et al. (U.S. Patent No. 5,079,600) ("Schnur"). Applicant respectfully disagrees.

The Patent Office has not shown where Schnur teaches or suggests an article comprising a substrate and a layer of palladium metal on the substrate defining a surface, as described in independent claims 3, 55, and 69. The Patent Office appears to have construed the term "palladium metal," as recited in independent claims 2, 54, and 69, as referring to *any* form of palladium. However, "palladium metal" refers to a *specific* form of palladium, namely elemental palladium. In particular, the instant application teaches that:

> a variety of materials can be deposited on the surface of the article to serve as a resist. For example, *thin layers of metal* such as gold, silver, copper, nickel, cadmium zinc, *palladium*, platinum, iron, chromium, alloys of these and the like can be deposited by those of skill in the art. Etchants that will dissolve resist such as these should be selected to *oxidize atoms from the surface*, and to include ligands, such as chelating or coordinating ligands, that will dissolve the oxidized atoms removed from the surface (page 20, lines 16-21). (Emphasis added)

Thus, the recitation of "a layer of palladium metal" in the pending claims does not contemplate the use of any chemical structure comprising palladium atoms, but rather, is directed to sheets or *layers* of metals, as this passage illustrates. Accordingly, it is unreasonable to stretch "a layer of palladium metal" to encompass any form of matter that comprises palladium atoms, when the specification specifically teaches otherwise, namely that the "layer of metal" is a layer that is deposited on the surface of an article as an layer to serve as a resist for subsequent etching.

Accordingly, the rejections of the claims in view of Schnur relies on a definition of "a layer of palladium metal" that is inconsistent and unsupported by the way this term is defined and used in the specification. Schnur nowhere discloses or suggests a layer of palladium metal. Instead, Schnur teaches a layer of oxidized palladium "bound to the most reactive of the spatially different areas of

reactivity" (column 8, lines 8-9). This palladium in Schnur is in the form of palladium chloride ($PdCl_2$), not palladium metal, and one of ordinary skill in the art would understand the differences between the pure form of an atomic element and a salt that comprises the atomic element ionically combined with other elements.

For instance, Schnur explains that the wafer's surface is "coated with a colloidal palladium-tin (Pd/Sn) catalyst precursor which adheres only to those regions of the film that had not been irradiated" (column 9, lines 12-15). However, Schnur then discloses that the palladium-tin catalyst is palladium chloride/tin chloride ($PdCl_2/SnCl_2$), as indicated in column 11, line 42. Schnur nowhere discloses or suggests that palladium metal can be used, and it is not seen how palladium metal could be used as a substitute for palladium chloride in the reactions disclosed in Schnur since their oxidation states are different and the palladium in palladium chloride (i.e. Pd^{2+}) is subsequently bound to an olefin by complexation, a reaction which does not occur with palladium metal. See column 8, line 62 to column 9, line 17. Consequently, the "the first layer" referred to in column 8, lines 2-9 in Schnur refers to a palladium salt, not palladium metal. Because each limitation is not taught or suggested in Schnur, claims 3, 55, and 69 are believed to be patentable over Schnur. Claims 4-15, 56-59, and 70-75 depend from claims 3, 55, and 69, respectively and thus patentable for at least the same reasons.

Accordingly, withdrawal of the rejection of the claims on this ground is respectfully requested.

Rejection of claims 70-75 under 35 U.S.C. §103(a)

Claims 70-75 have been rejected under 35 U.S.C. §103(a) over Schnur in view of Clark et al. (U.S. Patent No. 4,728,591) ("Clark").

For the reasons noted above, independent claim 69 is believed to be patentable over Schnur. Since claims 70-75 each depend, directly or indirectly, from independent claim 69, claims 70-75 should also be patentable over Schnur for at least the above-described reasons. It is not seen how the teachings of Clark cure the deficiencies of Schnur. Thus, claims 70-75 are believed to be patentable over Schnur in view of Clark. Accordingly, withdrawal of the rejection of claims 70-75 is respectfully requested.

CONCLUSION

In view of the foregoing, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this response, that the application is not in condition for allowance, the Examiner is requested to call the undersigned at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge our Deposit Account No. 23/2825, under Docket No. H0498.70079US01 from which the undersigned is authorized to draw.

Dated: 06/10/09

Respectfully submitted,

By_____

Timothy J. Oyer, Ph.D.
Registration No.: 36,628
Tani Chen, Sc.D.
Registration No.: 52,728
WOLF, GREENFIELD & SACKS, P.C.
Federal Reserve Plaza
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
617.646.8000